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Cooking Stoves

By JOSEPHINE H. PEIRCE

". . . and bake in an afternoon oven" finishes the old recipe for cob apple pie, meaning an old brick oven, of course, for the recipe was printed in 1793. Yet many of the ovens were used for a century more.

Fig. 1 — FIREPLACE
showing baking oven and utensils, in the Willard Homestead, Still River, Mass., owned by Miss Eleanor Hudson.

The earliest ovens appear to have been pits in the ground heated by means of wood fires. The food was placed in the heated cavity and covered with earth, and sometimes stones were heated and the food placed on them. This is the method used today for a clam bake or barbecue.

In New England, the hearth-fire was used not only for heating but for cooking, and the uncooked food was placed on the hearth in front of the fire, or skewered on spits which rested on brackets attached to the backs of the andirons. Huge kettles, suspended over the fire, were used to boil meats and vegetables and to heat water. But, at a very early date, brick ovens were built into a back corner of the fireplace, (as shown in Fig. 1). It took a steady hand to put an iron pot full of hasty pudding on the long handled oven peel (shown at the left of the fireplace) and insert it in the oven.

Later a reduction in the size of the fireplace and a decided improvement in baking was made, when the oven was built at the side of the fireplace and supplied with a separate flue con-

(*Continued on page* 59, *column* 1)

Basket Making

By LAWRENCE B. ROMAINE

I offer these notes only after having searched through every available source for information. I feel sure that I am offering material not in any reference library. THE CHRONICLE, (Vol. 1, No. 13) backs me up on the fact that there were moulds and swivel "stools" used in basket work. The magazine *Antiques* (Vol. 19, No. 5) published a story about the rise and fall of the basket industry in Connecticut. *Homespun Handicrafts* by Ella Shannon Bowles, devotes the first chapter to the history of basket weaving. The subject is worthy and the material new.

Having acquired the moulds shown in Figure 1 from East Norton, Mass., and the equipment shown in Figure 2 from Mansfield, Mass., with a lot of stories, I started to check up the information in my own library. After going through *The New England Farmer* for some ten years, *The Family Magazine, The American Magazine, The Boston Mechanic* and many more journals and newspapers, not to mention several mechanic's "guide books," I decided that what little information I had should be brought before those who might find it useful and perhaps carry on the job of "digging out" more facts. I might add here that the East Norton collection may be seen at the Wells Museum, at Southbridge, Mass., including the mould upon which the moulds were made and of which I neglected to take a picture.

The East Norton moulds came from the Bruce family. They had not been used for over fifty years, according to Mr. Bruce, who is now nearing seventy years of age. Many other moulds had been burned as kindling long ago, leaving only the examples shown here. The curious swivel "stool" shown in Figure 3 came with this same lot from the Bruce barn. On this, the

basket rested during construction, so that it could be rotated as the work progressed. Within the memory of the former owner, the family raised strawberries and made baskets for the retailers, who peddled them in nearby towns and cities. Back in 1830, baskets were made only for the use of the family. I imagine that the father taught the children and that the household took care of its own needs for baskets for fruit, cheese, clothing, etc. Some of the moulds are a good deal

Fig. 1—Basket-making Equipment from East Norton, Mass.

earlier than others and the entire lot represents quite a period of time. In this section at least, some of the homes that manufactured baskets in quantity, hiring several "outsiders", were termed "factories". Production in the fifties and sixties was "somethin" to chat about. At times, one family would have as many as five or six "outsiders" working for them. The picture painted by Mr. Bruce is quite similar to the one published by *Antiques* in May, 1931, in which Mr. McClees, the author, tells of the growth of the basket business in Dantown, Conn., from forty families in 1860 to almost double that number in 1880, and the failure of the whole community in the panic of 1893.

The Mansfield collection, pictured in Figure 2, came with dates and facts much the same. They had been stored away for "ages and ages". At first, it might have been a hundred years, but later memory became sharper and the age of the last baskets made was about fifty years. Aside from the slightly different construction of the crude old "stools" and the fact that more rectangular moulds, having escaped the wood pile, are in the second lot, they might have all been in the same barn.

Taking both groups, there are a few interesting things to point out, though I shall not attempt to reconstruct each piece. The moulds are all hollow, being built of pine staves like a barrel, to make them light and easy to handle. The "mould mould" was hewn out of a solid chunk of maple, shaped for the size basket wanted; a hole was then bored in the top and a handle inserted. Around this "mould mould" the staves were placed and nailed to the bottom of the basket. The "mould mould" was withdrawn, a top was inserted at the top of the staves and nailed in place. The handle was then set in and pinned through the bottom. The largest one, in the center of Figure 1, has a frame built on a trestle with an upright and pin at the other end. One of the small ones, at the right of the "stool" in Figure 2, has a leather band wrapped around it, perhaps to prevent splinters. The "stools" are delightfully crude, the one in Figure 3 simply turning on a leather and the other on an iron pin.

White and black oak and hickory were used in Massachusetts, as in Dantown, Connecticut. The logs were cut during the winter, quartered and stored till spring. In Connecticut, they were left in ponds and streams to guard against insects. Here in Massachusetts, the wood was also often left in ponds to soak and season, but there was no mention of insects. (Perhaps there were more bugs in Connecticut, or were there?) They were then split into thin strips and these, in turn, shaved with a drawing knife. One thing I am anxious to learn is whether

Fig. 2—Basket-maker's Equipment from Mansfield, Mass.

the use of moulds was general or whether confined to this section of New England. Mr. McClees in the article above referred to, does a very excellent pictorial job BUT shows no moulds! I am on the verge of stating that moulds were used only in Massachusetts and have just enough self-restraint to put it in the form of a question to other members.

The townspeople of Middleboro were busy with making hats and coaches at this time and I can not find any information of basket work. Brockton and Taunton also had other interests, perhaps because the peddler bought his baskets in the outlying districts and villages and brought them to town. I must therefore base all my conclusions on information from a very few individuals.

At any rate, here are the moulds and their story for what it is worth. I hope I have made no misstatements, but, if I have, that no one will hesitate to write in with corrections. I should like to hear of other basket moulds and doubt very much whether such moulds were ever used for other purposes. I wish I could have pictures of a family and the outside hired help at work, or even the family diligently preparing baskets for the fall harvest, but I can not find any one old enough to pose and no stereoscopic views in the attics and lofts with the moulds!

Fig. 3—Basket-maker's Revolving Bench

[Apparently, the equipment found by Mr. Romaine was used for making splint baskets. Has any reader definitely learned of baskets of other materials being made with moulds and a "stool"? With a similar outfit from Lancaster, Mass., came an oval copper pan, about two and a half feet long, said to have been used to soak the material to make it more pliable, and it had been assumed that this referred to osiers. — Ed.]

Connecticut Industries

We have selected the following extracts from a pamphlet by Professor J. Kip Finch for use at the Columbia University Engineering Camp at Lakeside, Connecticut. They will be of especial interest to students of the early industrial history of Connecticut.

"In the period between the close of Queen Anne's war (1713) and the Revolution (1776) the population of the state increased almost five-fold.

(*Continued on page 63, column 2*)

Stoves

(Continued from page 57, column 2)

nected with the chimney and a door or "lid" (Fig. 2). These were used for the Saturday baking, and directions for building them were included in cook books up to the time of the Civil War — possibly later.

For a family of medium size, it was suggested that an oven holding ten or twelve plates would be large enough, and the best ovens were to be made as follows: "After the arch is formed, four or five bushels of ashes are spread over it, and then a covering of charcoal over that, then another layer of bricks over all. The use of this is, that the ashes become heated, and the charcoal being a non-conductor, the heat is retained much longer. In such an oven, cake and pies can be done after the bread is taken out, and then custards after them." Some cooking authorities advocated puddings after the bread, then pastry, after that the cakes and gingerbread, and lastly the custards and such things as "rye-an-injun" which could be left in over night.

The first time that the oven was heated, a large fire, which would burn six or eight hours, was made, and the oven "lid" (in place in Fig. 2) kept up, after the fire was out until rekindled again for baking, preferably the following day. Heating the ovens was something to be learned by experience and observation. In cold weather, or when the oven had not been heated for some time, a longer time was necessary to bring it to the desired temperature, and it was found that the construction of the oven and the kind of wood made a great difference. A system could be devised, however, and Miss Beecher's *Domestic Receipt Book,* published in 1846, advises: "Have oven wood prepared of sticks of equal size and length. Find, by trial, how many are required to heat the oven, and then require just that number be used, and no more." Mrs. Child, in *The American Frugal Housewife,* published in 1836, declared "Economical people heat ovens with pine wood, fagots, brush and such light stuff. If you have none but hard wood, you must remember that it makes very hot coals, and therefore less of it will answer. A smart fire for an hour and a half is a general rule for common sized family ovens, provided brown bread and beans are to be baked. An hour is long enough to heat an oven for flour bread." Mrs. Cornelius, who published *The Young Housekeeper's Friend,* in 1846, decided that, for a large oven heated with hard wood, two hours in burning out was better. All agreed the fire should be made at the back of the oven. All the fire was to be burned off, then the coals raked over the bottom of the oven to lie there a minute, after which the oven was to be swept clean, except that a few coals might be kept, to place near pans which required most heat. The rule to determine the heat of the oven was simple. "If you sprinkle flour on the bottom of the oven, and it burns quickly, it is

Fig. 2— Brick Oven
in home of Dr. and Mrs. Franklin L. Bishop, at Leicester, Mass.

too hot. If you cannot hold your hand in longer than to count twenty moderately, it is *hot enough.* If you can count thirty moderately, it is *not* hot enough for bread." When twenty was counted, it was a quick oven, thirty was a slow oven, and beyond forty, you had an afternoon oven. To prevent pies and cakes from scorching on top, an old broom was wet and turned around near the top of the oven till it dried.

About 1854, a new kind of oven was patented by a Mr. Carlisle of Chesterfield, Maine. It was built of bricks in the usual manner, but the fire was built in a "vacancy" below the hearth, and a flue ran spirally around the outside, so that it was heated from the outside. This required no sweeping or wetting of the hearth, and would not crack. Another feature was that it could be kept constantly hot.

For mid-week or any daily baking the *bake kettle* and the *tin baker,* or *reflecting oven,* was used. The bake kettle was a three-legged affair with a handle and a tight cover, which was shaped like a shallow dish. A solid mass of coals was drawn out, the bake kettle set over them, the cover put on tight and a thick layer of coals placed on top. The tin baker was simply placed in front of the logs (Fig. 3). Another style had hooks so that it could be fastened to a coal grate.

At Thanksgiving time, as many as seventy-five or even a hundred pies were made in advance to be kept on hand. These were frozen, and the covered ones were slipped from the plates and packed in earthen crocks or even in chests, one upon another. When wanted, they were brought in and placed before the fire in a *pie-heater.* The pie-heaters were made of tin in several sizes and shapes, but the most common was much like a present-day tin cake cover, with half the side missing. Another type was called a *tin bonnet* and looked like the new bun warmers. This could be placed on the hearth and used for baking apples, as well as to heat pies and other things. *Plate warmers* of painted and decorated tin were kept in front of the dining room fireplace and pies could be heated in these if necessary. Shallow ones in which the plates stood in racks were also used, usually in the kitchen.

In 1750, Blanckley's *Naval Expositor* described certain stoves, used on shipboard, as "square boxes made of Plank filled with bricks, and when fitted with an Iron Ring and small Bars, are for burning charcoal in order for the Cook to dress the Admiral's or Captain's victuals on."

Ten-plate stoves for baking, made by the Germans, appeared in Pennsylvania about 1765 and had quite wide distribution, but the average size of the oven was very small — five and three-quarters inches high, ten and one-quarter inches wide, and seventeen and one-half inches long.

Although George Youle patented a cabouse stove for cooking in 1806, and improved it several times, his stoves did not become popular until much later, and then shipments of them were very small. On January 14th, 1820, Boston and Worcester

papers advertised "Six of Youle's patent Cook-Stoves just received per Comet, from New York and for sale at 28 Merchant's Row, Boston." C. Postley, of New York, patented several stoves both for cooking and heating, including a reservoir cooking stove (in 1815), but it was his open Franklin-type stoves for heating that were the best sellers. The first really successful cooking stove was the James stove, called the "Baltimore Cook Stove", which was made in Troy, New York, in 1815. The hearth and firedoors were placed on the side, and it was the same William T. James who, seven years later, patented the sunk hearth for the reception of

Fig. 3 — Tin Baker
owned by Miss Eleanor Hudson.

ashes. Thomas Woolson's first patent was registered in 1806 but his "Yankee Notion," made in 1832-1833, led the way for all elevated oven stoves. One of these, made in Stewartstown, N. H., in 1833, has been in use every day since; and the owner writes that it still bakes well. Many of the early cooking stoves had lower doors which could open and swing back as the Franklin stoves did, and when the doors were open the heat from the open plates heated the room.

The brick ovens were really considered quite satisfactory for baking, and the problem for most of the inventors was not the ovens but low down boiling holes that would take the heavy pots and kettles which had been hung in the fireplace, and do this part of the cooking with less fuel.

When box stoves became popular for heating, two more boiling holes were added, and they became *parlor cook stoves*. For baking, a drum oven was inserted in the stove pipe. Aikin's patent "Drum Oven," advertised in 1840, "for uniformity and convenience in baking *are warranted to surpass* any Oven ever *offered for sale*, the ordinary fire usually kept in Stoves is quite sufficient for baking, and the heat gained from the Oven makes a great saving in the destruction of fuel." Practically the same ovens are still offered for sale today in mail-order catalogues. They look much like rural delivery boxes. Portable ovens were used on top of the stoves, and were very similar to those used now for summer cooking on gas plates or kerosene stoves.

John Conant, who took out a patent in 1819, erected a furnace at Brandon, Vermont, about 1823. He made a stove with the oven over the fire and a door in both ends, the front one over the fire door. Each side extended so as to receive a pot, which rested in a recess by its rim, so that it presented one side and a portion of the bottom to the fire. The teakettle (Fig. 4) is one made for this type of stove.

"Rumford Roasters," invented by Count Rumford, who was born in North Woburn, Massachusetts, christened Benjamin Thomas, and knighted by King George III in 1785, were imported from Great Britain and set up in many homes in and around Boston. This roaster had an ingenious arrangement of flues that conveyed the hot air around the food in the oven, and there was what one historian termed "an enthusiasm and epidemic excitement about it." One of these was in use in a house in Salem from 1800 to 1862.

From 1790 to 1845, eight hundred patents were taken out for stoves, and the Commissioner of Patents wrote in his report, "Notwithstanding the swollen list, genius has been fruitfully exercised during the past year upon the useful article." During the year 1837 alone, one hundred patents were granted for improvements in cooking stoves, exclusive of grates, ranges, and other stoves, and many of them were for coal. One of them, invented by John Collum, of Grafton, Massachusetts, looked like a truncated pyramid into which a small furnace with a grate was inserted. Doors were placed on two sides, and sliding shelves for baking were provided. On the top of the stove there was provision for two boiling holes, and this top had to be taken off to put in the coal. The stove was to be made of tin-plate, sheet iron, copper or other metal, and was very light and portable. It was fitted with handles so as to be easily moved from place to place and several sizes were contemplated. However there is no evidence that many, if any, of them were ever made.

The price of stoves is always of interest, and an advertisement in *The Worcester Spy* on September 24th, 1823, listed several well known makes, including Wilson's Cooking Stove, from $30 to $50, and James' Cooking Stove, from $25 to $50. A bill, receipted in 1827 and owned by the American Antiquarian Society, gives

Fig. 4 — Tea Kettle
owned by Mrs. Harry Sargent.

the price of a stove as $25, but the funnel, staples, etc., added up to $19.18, so that, installed, the cost totaled $44.18. In *The Worcester Palladium* of December 15th, 1841, a news item reads: "*Stoves*. It is stated in *The Peekskill Republican*, that not less than 20,000 stoves have been made at the several foundries in that thriving village during the past year; and they will average at least $5. each."

The shaking grate was invented by P. P. Stewart, in 1851, and indicates that coal had not been generally used for fuel, since he had been manufacturing stoves since 1838. From that time, however, the improvements in cooking and heating stoves made very rapid strides, especially from the close of the Civil War up to 1873. Today, when apparently so much home baking is done in automatic insulated ovens, it is amazing to find so many of the old stoves still in use, and still giving good service.

Early American Industries Association

Early American Industries Association

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Communications should be addressed as follows: Pertaining to the *contents* of THE CHRONICLE, to W. B. Sprague. Applications for membership, to S. E. Gage. Suggestions of prospective members, to Miss Eleanor Hudson. Other matters to Burton A. Kollmer. Addresses as here given.

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Our Purpose

The purpose of the association is to encourage the study and better understanding of early American industry, in the home, in the shop, on the farm, and on the sea, and especially to discover, identify, classify, preserve and exhibit obsolete tools, implements, utensils, instruments, vehicles, appliances and mechanical devices used by American craftsmen, farmers, housewives, mariners, professional men and other workers.

Dues

The annual dues are payable September 1st, and are as follows: Regular members $1.00; Contributing members, $2.00; Supporting members, $5.00; Sustaining members, $10.00, and up. There is no distinction between the classes, except the amount of the dues, but the publication of THE CHRONICLE cannot be financed unless a considerable number of the members pay more than $1.00. Each member is expected to voluntarily place himself in the class which represents the amount he is willing to contribute to the support of the Association for the current year. THE CHRONICLE is sent to all members without additional charge. Many of the back numbers may be secured from the Treasurer for 20c each, and a twelve-page index to the twenty-four numbers of Volume I, containing a useful bibliography, for $1.00 each. For further information, address any of the officers.

South County Museum

The South County Museum of Rhode Island was incorporated in November, 1933, soon after the formation of the Early American Industries Association. Starting with one hundred items, the collections have grown to something in excess of six thousand items.

The beautifully expressed "Purposes" of the Early American Industries Association, "To encourage the study and better understanding of early American industry in the home, in the shop, on the farm and on the sea," etc., might equally serve for the Museum, in that we also propose to preserve and exhibit obsolete tools, implements, utensils, instruments, vehicles, appliances, and mechanical devices, et cetera, but the writer rather likes to express one of our aims in a more homely manner — "to discover, collect, preserve and display the things our forefathers used and the things *that made* the things they used." We hope to give to the unknowing a true picture of the simple lives of the New Englander and especially, of course, of the early settlers. So we have not only definitely dated historical items of the seventeenth century but also much later ones to show how Yankee inventive genius occupied itself as time marched on.

Specialization in especially choice items is not primarily for us. Of course we experience the collector's thrill when a superlative item, such as our skewer hanger, is donated (page Mr. Lawrence B. Romaine!), but the crudely made article may tell the story of its economic use quite as well. By and large, the hand-made items were made to last as long as possible and finished just as well as the maker knew how, but all were not equally skilled and some, then as now, were constitutionally indifferent. So one chap was satisfied with two notched sticks, tied with a string, for use as flail, while another made his flail-swivel of one piece of beautifully worked hickory and used eel skin for the toggle.

The time to apply salt to the tail of an antique is *before* it disappears. One definition of an antique is "something which has been outmoded by more modern invention". Truth to tell, our washing machine of perhaps 1860, with its crude wooden pump to squirt soft soap on the clothes, or our hand operated vacuum cleaner of possibly 1880 quite definitely excite our visitors to a greater extent than does our several-hundred-year-old apple-wood plow. Try and find any quantity of Portland-star matches or buttonhooks, both in common use forty years ago. Our young visitors are often much more interested in a card of sulphur matches than in much earlier items, and as time goes on, the "near-antiques" of today will become actual antiques by the definition quoted above.

We do not hesitate to display a few field puff-balls, because the fine powder therein was a well nigh universal remedy for bleeding. The collection of information about old-time processes is important, and how black birch brooms or withe fences were made or how the Colonial housewife prevented butter from sticking to the wooden butter-paddle are matters of quite apparent interest to our callers. So our wall labels attempt to tell such stories.

Our further aims are expressed in a general notice tacked to the harness room door, "We don't want to live in a barn!" Barns are fine for animal equipment and farm implements, but we look forward to the time when we can move our other objects to more appropriate settings in a whole village of old-time Rhode Island shops and houses. We want to give the smith his forge, the shipwright his yard, the cooper his shop, the merchant his counting-house, the weaver his loom, the printer his press, the goody her kitchen, and so on through the long list of apothecary, harness-maker, pewterer, physician, blockplane-maker, turner, surveyor, tinsmith, cordwainer, silversmith, charcoal-burner, miller, schoolmaster, tailor, snuff-grinder, etc.

Come and see us. The museum is located just west of Route 2 (which traverses rural country from Charlestown, R. I., to Providence). It is approximately 19 miles north of Charlestown (or Cross's Mills) to the third large shrub-planted rotary, which is the "Wickford" rotary. The museum is one-half mile north of this. Approximately eighteen miles south of Providence and seven-tenths of a mile south of the Tercentenary cement monument, indicating that the traveller is passing from East Greenwich to North Kingston, a large swinging sign is at the point on Route 2 where the visitor should turn westward. The museum is only a few hundred feet further.

The museum is open during the summer months and until October first from two to six P.M., every day except Monday. — J. E. B.

The Glove Maker

By William B. Sprague

[The capital letters interspersed through the text refer to the list of authorities at the end of the article.]

It may be taken for granted that gloves were made and used about as soon as man began to clothe himself, and that their manufacture was undertaken by specialists as far back as that of any other article of wearing apparel. They are mentioned by many very early writers, Homer, Xenophon and Pliny (A). The glover's trade in France is dealt with by Diderot (B) with his customary thoroughness, but, for what reason this writer cannot fathom, is entirely ignored by every English or American "book of trades" thus far examined, except for a casual mention by Rivington (C), under the heading "Needle Maker," to "the glover's needle with a triangular point." Knight's Dictionary (A) goes into considerable detail with respect to the dressing of the skins for gloves, which subject has already been dealt with in the article on *The Tanner and the Currier* (The Chronicle, Vol I, Page 14-4), and describes the contemporaneous (1874) mode of manufacture, when machinery was extensively employed, but does not inform us as to the methods of the trade in the pre-factory era. As a basis for this article we have therefore been obliged to rely principally on local sources of information from Gloversville, New York.

An isolated paragraph in the *New York Sun* of February 16th, 1934, read as follows: "Gloves were first made commercially in America in 1809, when Talmadge Edwards of Jamestown, N. Y., hired a few operators to help him make them. When the demand increased, he hired stitchers who did the work in their homes." The statement that this was the first "commercial" glove-making in America appears, however, to be confuted by the mention, in Johnson's *Wonder-working Providence* (1651), of glovers as among those who had "orderly turned to their trades" in Plymouth colony (D). According to a Gloversville newspaper of 1881 (E), the business started in Fulton County, at Kingsboro [a few miles from Gloversville — *Auth.*] in 1809. [Jamestown is in Chautauqua County, and very possibly was a misprint for Johnstown in the *Sun* item, or in the source from which it was derived.—*Auth.*] "In that year Talmadge Edwards, formerly a leather dresser in England, moved from Massachusetts to these parts for the purpose of teaching James Burr and W. C. Mills the art of dressing leather . . ." (E). Apparently, the *Sun* statement would have been substantially correct, if it had referred to the "State of New York" rather than to "America."

The first gloves were made from native deer skins, tanned by processes learned from the Indians (F). Later (E) the supply of deer skins was drawn from all parts of the American continent. "Kid" eventually became popular, but whether "imported" or "domestic", is always made from the skins of sheep rather than goats (E). James Burr, referred to above, invented the *bucktail*, "a revolving apparatus by which the leather was made pliable" (E), but of this we have unfortunately found no description.

The earliest method of cutting was to lay a pattern, of very thin wood or pasteboard, on the thinnest and most pliable portion of the skin (E), mark around it with a piece of lead or a lead pencil (F, G), and then cut around this outline with shears (F). The writer has seen one set of these wooden patterns, said to have belonged to Philander and Lemuel Hencock, who commenced glove manufacture at Gloversville in 1819 (F). One piece is for the hand proper, both sides of the forefinger and little finger, and the inner sides of the other two fingers. There are separate pieces for the outer sides of the latter, and one for the entire thumb. The cut-out pieces were then sewn together "with square-pointed needles and double linen thread waxed"; sewing machines were not used until 1856 (G). The glove was then stretched on a hard wood form in the shape of an entire hand, minus the thumb, and a round stick thrust into the thumb of the glove, a process known as *laying-off* (F). Sometimes it was then pounded with a small wooden mallet to make it more soft and pliable (F). Occasionally "the backs of the gloves were decorated with paint, usually red and green, put on with a small wheel with a notched edge, first run through the paint, then applied to the backs of the gloves and mittens" (G).

Block cutting appears to have originated in 1859 and has persisted, to some extent, to the present day (F). The block was about two-and-a-half to three feet long and made of pieces of seasoned maple, glued together so that their *ends* furnished the cutting surface, and further secured by an iron rod which was run through them all and fastened with a clamp at each end. The block was furnished with legs so that its surface was about two-and-a-half feet from the floor. It was set either in a box of sand or on posts, which ran through the floor to the basement, to withstand the heavy pounding (F).

The early type of cutter's maul was a circular block of hard wood, preferably burl, about five inches thick and almost a foot in diameter, furnished with a short handle. This type of maul was superseded, about 1880, by a much smaller one, made of iron and covered with raw hide (F).

The cutting was done with dies, with steel blades forming the outlines of the necessary pieces to be cut. These blades were set in cast iron frames, each of which was supplied with a perpendicular iron post, which was struck with the maul one or two heavy blows. The *laying-off* process continued for some years after the introduction of block cutting (F).

AUTHORITIES

(A) *American Mechanical Dictionary*, by Edward H. Knight (New York, 1874); (B) *Encyclopedie ou Dictionnaire raisonne des sciences des arts et des metiers*, by Denis Diderot (1768), see heading "Ganterie"; (C) *Book of English Trades*, C. & J. Rivington (London, 1827); (D) *The Great Industries of the United States*, by J. B. Burr & Hyde (Hartford, 1873); (E) Clipping from unidentified Gloversville newspaper, dated November, 1881, article headed *The Industries of Gloversville;* (F) Information of Hon. William C. Mills, of Gloversville, 1929; (G) *History of Early Gloversville*, by Louise H. de la Mater, in souvenir program issued by Daughters of the American Revolution (General Richard Montgomery Chapter), July 4th, 1928.

According to Dr. Mercer's *Ancient Carpenters' Tools*, (p. 256), the pointed screw came into almost universal use in this country shortly after it was patented in 1846. Apparently this did not occur in England, as Rutledge's *The Boys Book of Trades* (London, 1866) makes no mention of the pointed screw, clearly illustrates (p. 39) a screw without point, and states (p. 42) that the principal use of the gimlet was boring holes "for receiving screws."

Early American Industries Association

Membership

Membership lists should be amended as follows: (N) indicates new member; (S) indicates non-member subscriber; (C) indicates change of address; (D) indicates decease; (R) indicates resignation; (Co) indicates correction.

CONNECTICUT

Bridgeport: Hall, Lewis F., 271 Mill Hill Ave. (N)
Litchfield: Upson, Walter L. (C)
Stamford: Warren, George E. (N)

GEORGIA

Augusta: Korn, Mrs. Chester, 2575 Henry St. (N)
Savannah: Mallory, J. M., 302 Victory Drive East (C)

ILLINOIS

Chicago: Sickles, Harry, Congress Hotel (N)

LOUISIANA

New Orleans: Howard Memorial Library, Robert J. Usher, Librarian (S)

MAINE

Ogunquit: Howe, Mrs. Frederick W., Box 623 (C)

MASSACHUSETTS

Kingston: Barnes, Mrs. Florence, R. D. 380 (C)
Newton: Bacon, Mrs. Frederick, 42 Hyde Ave. (N)
Salem: Lantz, Christian, 290 Essex St. (C)
West Newton: Fales, Mrs. Edward C., 31 Randlett Park (N)
Westfield: Johnson, W. O., Box 56 (N)

NEW JERSEY

Hillside: Blumgart, Mrs. Albert, 213 Winans Ave. (N)
Newark: Dunham, Miss Marcelline, 49 Manchester Pl. (N); Farley, James J., 31 Clinton St. (N)
Nutley: Berger, Mrs. George P., 91 Whitford Ave. (N)
Ridgewood: Morrow, Dr. Joseph R., Bergen County Hospital (N)

NEW YORK

Jackson Heights: Huestis, Stephen C., 3524 88th St. (N)
Great Neck: Held, Huyler, 149 Hill Park Ave. (N)
New York: Alpern, Harry, 107 Elwood St. (N); Warren, C. C., 212 E. 48th St. (C); Weekes, George L., Jr., 53 W. 57th St. (N)
Oneida: Borst, Charles, Kenwood Sta. (N)
Staten Island: Coles, Roswell, Historical Museum (N)

PENNSYLVANIA

Bath: Dewson, Stewart H. (N)

VERMONT

South Royalton: Hewitt, Bertha E. (N)

The Questionnaire

Questionnaires recently received have been tabulated as follows. For key to abbreviations, see page 7.

CONNECTICUT

Greenwich: H. Lawrence Coggins, P. O. Box 1062 (C). Collects HD, TC. Specializes in cabinet-maker's and carpenter's tools. Wants LP. Write *.

Norwalk: John K. Byard, Silvermine (C & D). Collects and deals in FT, KH, LD, TC, WM. Wants LP. Write, only *.

MASSACHUSETTS

Leicester: Mrs. Frank D. Peirce, Market St. (C). Collects KH. Wants LP, especially relating to the heating stove industry. Write *. Visit.

Northampton: Mrs. Harold Underwood Faulkner, 26 Barrett Pl. Interested in early American social and economic history. Wants information about the rubber industry, its early implements, products and establishments. Write.

NEW YORK

Oneida: Charles Borst, Kenwood Station (C). Collects KH, LD. Wants LP. Write *. Visit.

Connecticut Industries

(*Continued from page 58, column 3*)

This was an era of an almost balanced economy in each family. The forests were cleared to give land and furnished an abundant supply of fuel and building material. Agriculture and game gave food. Home industry provided light, clothing and winter stores. Children were an economic asset, giving help in meeting the ever present burdens of labor. A few imports, such as salt, tea and special cloth, exchanged for farm products, met the necessities of a simple and laborious life.

By the late 18th Century, however, the better lands had been taken up, the older lands were being rapidly exhausted, and the increase in population was forcing the development of marginal and submarginal areas. Consider, for example, the tremendous labor expended in clearing the unpromising hills of Litchfield County. Note that the earlier settlements — Bethlehem, Morris, Litchfield, Goshen — were hill towns, built on the broader backs of the long glacial ridges where stones were fewer than in the narrow valleys. The miles of stone walls, however, attest not only to the patience of the earlier settlers but speak eloquently of the population pressure which forced such a struggle to make use of such unpromising lands.

The toil expended on these ridges was, however, rewarded. The soil was rich and fertile and such a 'hill town' as Litchfield became the county seat, an important point on the road from Hartford west to 'York State', and remained until 1840, the fourth largest town in the state with a population of about 4,000.

Up to about 1800, however, 'general farming' prevailed without careful cultivation and manuring and without extensive specialization. In fact, no hoeing (which would have usefully employed more labor) was used and the method followed to get rid of weeds (largely annuals) was to keep a field fallow (worked but unplanted) for a season. Thus one-third of the land was always out of cultivation. In addition to this poor practice there was no crop rotation — a corn field remained a corn field from father to son — and this, with no manuring, resulted in a rapid exhaustion of the soil.

'Connecticut, in the second half of the eighteenth century was thus swiftly outgrowing the period of self-sufficing economy which served its needs during the colonial period.' In fact, the state 'was in some years unable to raise enough for its own needs, to say nothing of surpluses required if her inhabitants were to enjoy luxuries and manufactured articles from England and Europe.'—*Agricultural Economy and Population in Eighteenth Century Connecticut.* Pub. No. XL of the Connecticut Tercentenary, Yale Press, 1935. (In this latter activity, New London had become the Connecticut seaport, comparable with New Bedford and Salem in Massachusetts, and the home of the shipping merchants.)

* * *

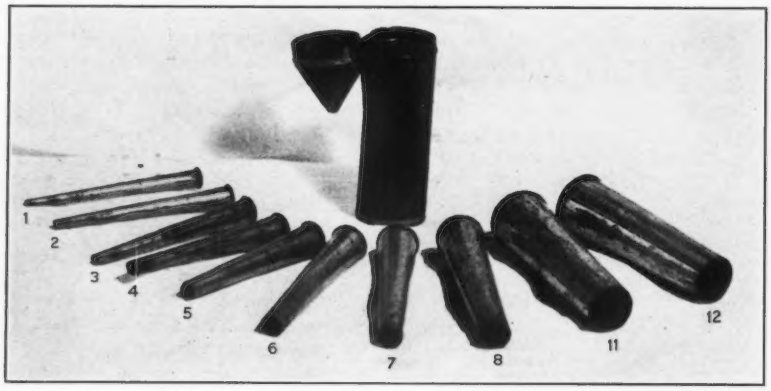
After 1800 there was a change. Specialization in agriculture occurred. Tobacco growing in the Connecticut Valley, for example, became an important activity and tobacco still remains today the principal (one-third) agricultural product of the state. Furthermore, cultivated lands no longer profitable were turned into pasture, and beef and other cattle were brought into Connecticut for pasturing, fattening and resale. There was also a development of dairying, butter and cheese-making (old cheese presses turn up at many country auctions even today) and dairy products—principally milk, cream, and ice cream are still important. In short, only those agricultural activities which showed a profit continued—grain was imported from the west and the agricultural economy was no longer balanced. Parallel with this change, a beginning was made in the development of industry."

(*To be continued in next issue*)

COMMUNICATIONS

From Mr. J. Earle Bacon:

"I am sending you a picture of a set of tubes and their container, concerning which I would be glad of information. They are a fine example



of the tinsmith's skill. The tubes nest perfectly, and are four and a half inches long. The largest one has a diameter of one and a half inches at top, and one and an eighth at bottom; the smallest, one-half at top and one-eighth at bottom. There were probably twelve tubes in the set. Numbers nine and ten are missing."

From Mr. R. H. Blodgette:

"From the description of M. E. G. of the extracting of lard from the leaf and gut fat, it might be understood that it was squeezed from the uncooked leaf with the tweezers, which were two paddle-like pieces about twenty-eight inches long and fastened at the base with a heavy rope tied through two holes, acting like a hinge. As a matter of fact, it was *after the leaf was thoroughly cooked* so that the lard was out, it was all put into a bag or heavy cloth and squeezed tight with the tweezers. Do this and then empty the remaining parts into a bowl and salt them, and you will have the real 'scraps' like Grandmother used to make. She sometimes cut in pieces of lean, which made the scraps much better."

From Mr. Willis H. Ropes:

"When I was a young man, in the retail grain business with my father, in the eighteen-sixties and seventies, it was the universal custom to sell grain by the 'struck' half-bushel. The wooden measure was filled as lightly as possible, and a wooden even-edged piece of wood, resembling a ruler, drawn across the top, removing all the kernels above the top rim. In unloading the cargoes of grain from our vessels from New York and delivering lots to purchasers waiting on the wharf, it was the duty of one of our men to fill and 'strike' the half-bushel measures in the hold of the vessel, as they were passed up on deck and emptied into bags to be tied and taken away. One of our men, who worked for our firm forty-nine years, could measure more bushels from a cargo than any of the others, having the knack of filling measures lightly. I cannot learn the exact date when the law went into effect requiring all grain to be sold by weight, as, of course, it should be. The Essex Institute has a set of wooden measures, half-bushel, peck, four-, two- and one-quart, which were used in former days to sell dry grains by measure. Lately I visited the old Richards-Claflin house, the home of the Wenham (Massachusetts) Historical Association, which has a large and remarkable collection of dolls, an herb house and 'The Barn,' full of old tools. The house, built in 1663 by Robert Macklafin, has an unusual and interesting interior finish and was occupied for many years by the Richards family, who sold it to the Wenham Improvement Society. It is well worth visiting. While there I was asked if I could name the uses of two items. One was a wooden shovel which I at once recognized as a tan shovel, used by tanners, when ground hemlock bark was generally employed in tanning hides. Now the chemical method (chrome tanning) is almost universally used for light, upper leather. The other item was a wooden knife, nearly two feet long, made from one piece of straight-grained wood. The handle gave a full grip and the blade, fully half an inch thick at the top, sloped to an even edge,—very similar to a flax knife, although it did not show the usual signs of wear. The person who showed it to me said it was used for grain. Very possibly it was a 'striker,' used in a grain store in selling and striking bulk grain. The type of half-bushel measure, which we used in unloading grain from schooners, had an iron bar across, held with a central upright rod through the bottom, and set below the top edge, making an excellent handle to pass up the half-bushel from the hold. The wooden measures in the Essex Institute have no iron cross-handles. The wooden tan shovels referred to were made by a clever craftsman in Peabody, Massachusetts (formerly South Danvers), who worked them from a single piece of wood, probably maple, which was free of knots and imperfections."

From Mr. L. L. Thwing:

"I saw recently at the Essex Institute in Salem some of the old cabinet maker's tools that have been described for us by Mr. Willis H. Ropes (The Chronicle, Vol. II, No. 3). One of these tools was a huge plane used to make mouldings. Its iron was about five inches wide, and allowing for the curve, the cutting edge must have been at least six inches long. What sort of giants were they that could push such a plane? The obvious answer was that it was a two-man plane (one to push and the other to pull), but there was no handle or hand-hold to pull with. There was a half-inch hole running horizontally through the fore end, but what was that for? Even an iron rod thrust through this would be bent, if used to pull the plane along. There was ample space for a one-inch hole. Mr. Walter Knights, however, had a ready explanation of the method of using this plane, as he had seen something similar used himself. He solved the mystery of the small size of the hole in a few words. The rod that was thrust through this hole was not used for a hand-hold, but a leather harness was attached to it, with an apprentice at the other end, in which case the pull would be so close to the body of the plane that even a hickory pin would be strong enough; particularly as the full width of the cutting edge was not all engaged at once, except for the finishing cut."

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